

LoopStar® 780

Flexible Multi-service Solution for Packet-based Cell Site Backhaul



There is major shift taking place in the mobile backhaul space. Voice and data traffic are increasing exponentially across cellular networks with a corresponding increase in the number of cell towers and the transport networks. Providers are seeking ways to reduce network and transport costs by supporting a strategy designed to move away from a TDM-based transport network towards a packet network. To this end, more fiber is being pulled to cell tower locations and more Ethernet services are being added to mobile networks. ADC's LoopStar® 780 is ideally suited to address the challenges of wireless carriers in this transition. Deployed at the cell tower, the cost efficient LoopStar 780 can be used to provide standards-based circuit emulation services that allow TDM trunks to be backhauled over an Ethernet-based network, while simultaneously supporting IP Multimedia services to cellular users. This multi-service capability is the heart of the LoopStar 780.

The LoopStar 780 features and benefits:

- Provide cost-efficient transport of voice and data across a packet-based infrastructure
- Support legacy and next generation voice and data services
- Extend Quality of Service capabilities into the access network
- Integrate with copper, fiber, cable and radio infrastructures
- Incorporate standards-based SAToP pseudowire technology, along with full support for business-class Ethernet services
- Low cost platform enhances the business case for cell tower installation
- Temperature hardened to adapt to a variety of environments

The LoopStar 780 offers up to eight (8) ports of Structured Agnostic Transport over Packet Switched Networks (SAToP) for T1/E1 support. IP services are supported by four (4) subscriber-facing 10/100 Ethernet ports and one 100FX port. The WAN interfaces are flexible, offering both copper and fiber based backhaul solutions for 100/1000TX copper and 100FX/GigE fiber. Additionally, the WAN interfaces offer dual uplinks for redundancy.

ADC's LoopStar 780 was designed from the ground up as a carrier class device. It incorporates field proven pseudowire technology, along with full support for business-class Ethernet services. Additionally, as a temperature hardened and Telcordia NEBS Level 3 certified product, the LoopStar 780 is suitable for deployment in a wide range of environments and locations. Other carrier class features include: redundant hot swappable power supplies, BITS timing input, alarm outputs and EdgeAware™, a comprehensive suite of Intelligent Management and Control tools designed for the multi-service edge.

SPEC SHEET



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Ordering Information

Description	Catalog Number
Loopstar 780 with single DC power supply	LPS-780-DC L1
Loopstar 780 with dual DC power supply	LPS-780-DC L2
Loopstar 780 with single AC power supply	LPS-780-AC L1

Specifications

Powerful Ethernet Service Management

- EdgeAware intelligent management
- Traffic separation via VLAN switching
- 802.1p prioritization
- 802.1q VLAN tagging/stacking
- Rate limiting / TOS classification
- In-band management
- Layer 2 (RMON) stats
- Hands-free Ethernet cable test
- 802.3ad link aggregation

Circuit Emulation Services

- SAToP T1/E1 TDM Pseudowire
- CESoPSN T1/E1 TDM Pseudowire (future)
- Configurable Jitter Buffer

Management

- Local 10/100 (GUI)
- In-band (Web and SNMP)
- SNMP v1, v2
- HTTPS
- T1/E1 Loopbacks
- Real time clock
- Syslog

Built-in Interfaces

- Eight T1/E1 ports
- Four 10/100 Base-T ports
- (Customer facing)
 - Ethernet ports can also be used to cascade to a second LoopStar 780
- One 100FX (Customer or Network facing)
- Two GigE SFPs (Customer or Network facing)
- Two 100/1000TX (Customer or Network facing)
- BITS Clock Input (CESoPSN only)
- Ethernet local management port
- Telemetry
 - Three output relays
 - Three input points

Physical

- 1.75" (4.445cm) high x 17" (43.18cm) wide x 7.25" (18.45cm) deep
- ETSI compliant, full frontal access
- Wall mount or rack mount
- Dual DC power supplies: -48VDC (-40 to -60VDC) or 24VDC
- AC power option
- Temperature Hardened -40° to 65° C
- UL 60950, IEC60950
- FCC Part 15 – Class A
- CE Mark
- RoHS Compliant
- NEBS Level 3 Certified



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